Appendix A -- Commitments for Cycle 14

The following list identifies those post-restart actions committed to by the Davis-Besse Nuclear Power Station in this document. These commitments pertain to Cycle 14. Any other actions discussed in the submittal represent intended or planned actions by Davis-Besse. They are described only as information and are not regulatory commitments. Please notify the Manager - Regulatory Affairs (419-321-8450) at Davis-Besse of any questions regarding this document or associated regulatory commitments.

No.	Commitment	Section	Due Date
1.	On a long-term basis, follow-up assessments of programs will be performed using the Focused Self-Assessment program with criteria similar to those used in the Phase 2 restart program reviews.	IV.D.3	Periodic
2.	Davis-Besse will submit a license amendment request for revisions to the SFAS Technical Specification values.	IV.D.3	January 30, 2004
3.	Davis-Besse will submit a license amendment request to change the USAR's description of emergency diesel generators' frequency and voltage transient values during the automatic loading sequence.	IV.D.3	January 30, 2004
4.	Davis-Besse will submit an exemption request for a fire area found to be lacking full fire suppression capability. Until this request is approved, compensatory measures will be maintained.	IV.D.3	February 28, 2004
5.	Davis-Besse will submit an exemption request to credit the new Boron Precipitation Control method.	IV.D.3	February 28, 2004
6.	Maintenance activities have been scheduled for the next refueling outage to replace the RCP 2-1 and 2-2 case-to-cover gaskets.	IV.J.1	Next refueling outage
7.	Davis-Besse will perform a Completeness and Accuracy review and an expanded sample of regulatory submittals dated between January 1996 and March 2002.	IV.I	March 31, 2004
8.	An Apparent Cause Review Group (a subcommittee of the CARB) will be established and will assess the adequacy of apparent cause analyses. After that time, CARB will perform reviews of selected apparent cause analyses to provide additional assurance of their continued acceptability.	V.A.5	When the apparent cause analyses presented to CARB meet the goal for quality of apparent cause analyses.

Appendix A -- Commitments for Cycle 14

No.	Commitment	Section	Due Date
9.	The number of Apparent Cause Evaluators will be reduced and those personnel will receive additional training. An Apparent Cause Review Group will be established to assess the adequacy of apparent cause analyses.	V.A.5	January 30, 2004
10.	Requalification or refresher training will be conducted for site personnel who perform management observations.	V.A.2	Periodic
11.	Davis-Besse will implement the FirstEnergy process for recruiting talent, identifying talent, and identifying needs and planning to fill vacancies as they become open, developing a rotation strategy for personnel, and providing feedback to Davis-Besse personnel.	VI.A.2	June 2004
12.	Davis-Besse will implement the FENOC leadership development curriculum for the training of managers at Davis-Besse.	V.A.2	June 2004
13.	SCWE training will be provided to new employees and contractors.	VI.A.3	As needed
14.	The results of ECP feedback to employees who raise concerns and the results of SCWE collective significance reviews will be publicized in order to increase confidence in the effectiveness of the ECP. This publicity will be structured to avoid compromising the confidentiality of those employees.	VI.A.3	Periodic
15.	Davis-Besse will establish focus groups of employees to obtain additional SCWE feedback. The focus groups will consist of randomly selected employees, who will meet with an independent consultant to provide any issues or concerns for action by management.	VI.A.3	Periodic
16.	NQA will perform assessments of safety culture at Davis-Besse.	VI.A.4	Annually
17.	The ECP group will conduct surveys of station personnel to determine their views related to the condition of SCWE at Davis-Besse.	VI.A.4	Annually

Appendix A -- Commitments for Cycle 14

No.	Commitment	Section	Due Date
18.	Davis-Besse will arrange for an independent contractor to perform an assessment of safety culture at Davis-Besse using a methodology similar to that previously employed by PSHA.	VI.A.4	Fourth quarter of 2004
19.	Engineering will provide engineers with examples of good calculations to use as models.	V.A.3	March 30, 2004
20.	Davis-Besse will implement the Cycle 14 Operational Improvement Plan.	IV.H.1	End of Cycle 14, except as indicated in the Plan
21.	Condition Report Analysts within each section will receive strengthened roles and responsibilities with respect to apparent cause analyses.	V.A.5	Ongoing
22.	Safety culture case study training will be provided to new employees	VI.A.3	Ongoing
23.	NQA will continue to assess procedure compliance in the fourth quarter of 2003.	V.A.5	December 31, 2003

Appendix B

Matrix Demonstrating Davis-Besse's Satisfaction of Criteria in NRC's Restart Checklist

No.	Description	Davis-Besse's Action	NRC Closure
1	**Adequacy of Root Cause Determinations**		
1.a	Penetration Cracking and Reactor Pressure Vessel Corrosion	As discussed in Section III.A, Davis-Besse has completed root cause analyses of the corrosion of the RPV head.	NRC Integrated Inspection Report 50-346/03-04
1.b	Organizational, Programmatic and Human Performance Issues	As discussed in Section III.B, Davis-Besse has completed root cause analyses of the organizational, programmatic and human performance issued.	NRC Special Inspection Report 2002018
2	**Adequacy of Safety Significant Structures, Systems, and Components**		
2.a	Reactor Pressure Vessel Head Replacement	As discussed in Section IV.B, Davis-Besse has installed and tested a new reactor vessel head.	Open
2.b	Containment Vessel Restoration Following Reactor Pressure Vessel Head Replacement	As discussed in Section IV.B, Davis-Besse has restored and tested the containment vessel.	NRC Inspection Report 50-346/03-05
2.c	Structures, Systems, and Components Inside Containment	As discussed in Section IV.C.1, Davis-Besse has performed inspections inside the containment to determine the extent of condition of PWSCC and boric acid corrosion, and has taken corrective action for degraded components as appropriate. Less than five restart corrective actions remain open.	NRC Inspection Report (to be issued)
2.c.1	Emergency Core Cooling System and Containment Spray System Sump	As discussed in Section IV.J, Davis-Besse has modified the containment emergency sump to correct existing conditions and add safety margin.	NRC Inspection Report 50-346/03-17
2.d	Extent-of-Condition of Boric Acid in Systems Outside Containment	As discussed in Section VIII, Davis-Besse has performed inspections outside the containment to determine the extent of condition of PWSCC and boric acid corrosion, and has taken corrective action for degraded components as appropriate.	NRC Inspection Report 50-346/03-22 (to be issued)

No.	Description	Davis-Besse's Action	NRC Closure
2.e	High Pressure Injection Pump Internal Clearance/Debris Resolution	As discussed in Section IV.E, Davis-Besse has performed tests and is installing and testing modified HPI pumps to ensure that they can perform their functions under design basis debris loading conditions. The testing results and modification plans were discussed with the NRC in a meeting on October 21, 2003 (Log 6131).	Open
3	**Adequacy of Safety Significant Programs**		
3.a	Corrective Action Program	As discussed in Sections IV.D Davis-Besse has reviewed and improved its Corrective Action Program.	Open
3.b	Operating Experience Program	As discussed in Section IV.D, Davis-Besse has reviewed and improved its Operating Experience Program.	NRC Inspection Report 50-346/03-09
3.c	Quality Audits and Self-Assessments of Programs	As discussed in Section IV.D, Davis-Besse has reviewed and improved its quality audit and self-assessment programs.	NRC Inspection Report 50-346/03-23 (to be issued)
3.d	Boric Acid Corrosion Management Program	As discussed in Section IV.D, Davis-Besse has reviewed and improved its Boric Acid Corrosion Control program.	NRC Inspection Report 50-346/03-17
3.e	Reactor Coolant System Unidentified Leakage Monitoring Program	As discussed in Section IV.D, Davis-Besse has reviewed and improved its Reactor Coolant Leakage Monitoring Program.	NRC Inspection Report 50-346/03-09
3.f	In-Service Inspection Program	As discussed in Section IV.D, Davis-Besse has reviewed and improved its Inservice Inspection Program.	NRC Inspection Report 50-346/03-09
3.g	Modification Control Program	As discussed in Section IV.D, Davis-Besse has reviewed and improved its modification control program.	NRC Inspection Report 50-346/03-09
3.h	Radiation Protection Program	As discussed in Section IV.D, Davis-Besse has reviewed and improved its Radiation Protection program.	NRC Inspection Report 50-346/03-17

No.	Description	Davis-Besse's Action	NRC Closure
3.i	Process for Ensuring Completeness and Accuracy of Required Records and Submittals to the NRC	As discussed in Section IV.I, Davis-Besse has taken action to improve the completeness and accuracy of required records and submittals to the NRC, and has performed an extent of condition review of previous NRC submittals.	NRC Inspection Report 50-346/03-19 (to be issued)
4	**Adequacy of Organizational Effectiveness and Human Performance**		
4.a	Adequacy of Corrective Action Plan	As discussed in Section V, Davis-Besse has established and implemented a Management and Human Performance Improvement Plan. Additionally, as discussed in Sections III.H and IV.F, Davis-Besse has performed an independent effectiveness review of Engineering, and has performed Functional Area Reviews of several other site organizations.	NRC Special Inspection Report 2002018
4.b	Effectiveness of Corrective Actions	As discussed in Sections V.A and V.B, Davis-Besse has demonstrated the effectiveness of its Management and Human Performance Improvement Plan. Davis-Besse has established and is implementing an Operations Improvement Action Plan to improve performance of Operations, and will be monitoring the improvements to ensure their effectiveness prior to restart.	Open
5	**Readiness for Restart**		
5.a	Review of Licensee's Restart Action Plan	As discussed in Section IV.H, Davis-Besse has issued a Restart Action Plan, and NQA has performed assessments to verify the adequacy of restart processes and categorization of restart items.	NRC Inspection Report 50-346/03-22 (to be issued)

No.	Description	Davis-Besse's Action	NRC Closure
5.b	Systems Readiness for Restart	As discussed in Section IV.E, Davis-Besse has performed a System Health Assurance Plan and has generated CRs for adverse conditions. As discussed in Section IV.H, Davis-Besse has performed restart readiness reviews for Modes 6 and first Mode 4, and will be performing similar reviews before entry into the second Mode 4 and Mode 2.	Open
5.c	Operations Readiness for Restart	As discussed in Section V.A, Davis-Besse has performed restart readiness reviews for Modes 6 and first Mode 4, and will be performing similar reviews before entry into the second Mode 4 and Mode 2. Additionally, as discussed in Sections V.B and V.C, Davis-Besse has performed an integrated assessment of operational readiness during the NOP test, and is taking corrective actions for the issues identified during the assessment.	Open
5.d	Test Program Development and Implementation	As discussed in Section IV.G, Davis-Besse has developed and implemented a Restart Test Plan. Additionally, as discussed in Section IV.B, Davis-Besse has performed a containment integrated leak rate test, and a NOP test of the reactor coolant system to check for leakage (including visual inspection of the in-core nozzles in the bottom of the reactor vessel).	Open
6	**Licensing Issue Resolution**		
6.a	Verification that Relief Requests A8 and A12 regarding the Shell to Flange Weld (previously submitted by letter dated September 19, 2000) is not Impacted by the Midland RPV Head	Davis-Besse submitted this verification by letter Serial Number 1-1281 on August 9, 2002.	RRs A8 and A12 approved by NRC in letter dated December 30, 2002 (NRC Inspection Report 50-346/03-04)

No.	Description	Davis-Besse's Action	NRC Closure
6.b	American Society of Mechanical Engineers (ASME) Code Relief Request for Failure to Maintain Original Radiographic Tests of the Midland Head to Flange Weld (Planned Relief Request A26)	Davis-Besse submitted the request on August 1, 2002, in letter Serial 2797 and on September 23, 2002 in letter Serial Number 2809.	RRs A26 and A27 approved by NRC in letter dated December 13, 2002 (NRC Inspection Report 50-346/03-04, Log 6037)
6.c	ASME Code Relief Request for Inability to Radiographically Test 100% of the Midland Reactor Pressure Vessel Head to Flange Weld (Relief Request A27)	Davis-Besse submitted the request on August 1, 2002, in letter Serial 2797 and on September 23, 2002 in letter Serial Number 2809.	RRs A26 and A27 approved by NRC in letter dated December 13, 2002 (NRC Inspection Report 50-346/03-04, Log 6037)
6.d	Resubmit Relief Request A2 (previously submitted by letter dated September 19, 2000) for ASME Code for Inability to Perform 100% volumetric and surface examination of Head to Flange Weld	Davis-Besse submitted the request on August 1, 2002, in letter Serial 2798.	RR A2 approved by NRC in letter dated December 17, 2002 (Log 6038)
6.e	Reconciliation Letter that Demonstrates How the New Reactor Pressure Vessel Head Correlates With the ASME Code and QA Index for Section III and Section XI – Commitments	Davis-Besse submitted this letter, Serial 1-1281, on August 9, 2002.	NRC found the reconciliation to be satisfactory in Inspection Report 50-346/03-04
6.f	Verification Letter of Technical Specification Pressure/Temperature Curves for New Vessel Head - Commitment	Davis-Besse submitted this letter, Serial 1-1285, on January 22, 2003.	NRC found the reconciliation to be satisfactory in Inspection Report 50-346/03-04, dated May 9, 2003

No.	Description	Davis-Besse's Action	NRC Closure
6.g	Request to relocate High Pressure Injection and Low Pressure Injection Subsystems Flow Balance Testing from Technical Specifications 4.5.2.h to Updated Safety Analysis Report Technical Requirements Manual	Davis-Besse submitted this request Serial 2949, on May 21, 2003.	NRC issued the amendment on August 12, 2003 (Log 6110)
7	**Confirmatory Action Letter Resolution**		
7.a	Verification that Confirmatory Action Letter Items are Resolved, Including a Public Meeting to Discuss Readiness for Restart	Davis-Besse has completed the actions in the CAL. Davis-Besse will arrange with NRC for a public meeting to discuss readiness to restart.	Open

Appendix B

Matrix Demonstrating Davis-Besse's Satisfaction of Criteria in NRC's Confirmatory Action Letter

No.	Description	Davis-Besse's Actions	NRC Closure
1.	Quarantine components or other material from the RPV head and CRDM nozzle penetrations that are deemed necessary to fully address the root cause of the occurrence of degradation of the leaking penetrations. Prior to implementation, plans for further inspection and data gathering to support determination of the root cause will be provided to the NRC for review and comment.	Davis-Besse quarantined the degraded reactor vessel head, cut samples of the areas of degradation for further data, and shipped those samples to laboratory for analysis. This analysis was completed and a report provided to the NRC.	As discussed in a letter from the NRC dated September 19, 2003, this item is closed.
2.	Determine the root cause of the degradation around the RPV head penetrations, and promptly meet with the NRC to discuss this information after you have reasonable confidence in your determination.	As discussed in Section III, Davis-Besse has performed root cause analyses of the degradation of the reactor vessel head and the failure to identify the degradation.	As discussed in a letter from the NRC dated September 19, 2003, this item is closed.
3.	Evaluate and disposition the extent of condition throughout the reactor coolant system relative to the degradation mechanisms that occurred on the RPV head.	As discussed in Section IV.C.1, Davis-Besse has performed inspections of the reactor coolant system to identify the extent of condition of PWSCC and boric acid corrosion.	Open

No.	Description	Davis-Besse's Actions	NRC Closure
4.	Obtain NRC review and approval of the repair or modification and testing plans for the existing RPV head, prior to implementation of those activities. Prior to restart of the reactor, obtain NRC review and approval of any modification and testing activity related to the reactor core or reactivity control systems. If the reactor vessel head is replaced in lieu of repair or modification, the replacement must comply with appropriate Commission rules and industry requirements.	As discussed in Section IV.B, Davis-Besse has replaced the reactor vessel head, and has performed inspections and tests of the new head and has verified its acceptability.	Open
5.	Prior to the restart of the unit, meet with the NRC to obtain restart approval. During that meeting, we expect you will discuss your root cause determination, extent of condition evaluations, and corrective actions completed and planned to repair the damage and prevent recurrence.	Davis-Besse and NRC are arranging for this meeting. One of the purposes of this report is to support the discussions at that meeting.	Open
6.	Provide a plan and schedule to the NRC, within 15 days of the date of this letter, for completing and submitting to the NRC your ongoing assessment of the safety significance for the RPV head degradation.	Davis-Besse provided the plan and schedule to the NRC on March 27, 2002 (Serial 1-1267). Davis-Besse provided an analysis of the safety significance of the head degradation on April 8, 2002 (Serial 1-1268) and August 13, 2003 (Serial 2968).	As discussed in a letter from the NRC dated April 5, 2002 (Log 1-4251), this item is closed.

Appendix C -- Remaining Major Actions for Restart

As of November 16, 2003, the following are the principal actions that remain to be completed after November 21 and prior to restart.

No.	Action
1.	Install and test the HPI pumps.
2.	Clean and repack valves to correct conditions identified in NOP test.
3.	Complete implementation of the electrical breaker coordination modifications.
4.	Resolve CAC pressure transient issues.
5.	Complete implementation of the restart-required actions in the Operations Improvement Action Plan and related improvements, as summarized in Section V.C. Remaining actions include: • Complete evaluation and remedial actions for operator understanding of standards and expectations. • Complete assessment and validation of key administrative procedures. • Complete training of Operators and certify Operators are ready to return to Operations. • Place operations oversight managers on shift. • Enhance NQA with non-Davis-Besse personnel, and perform NQA monitoring of simulator training effectiveness. • Provide oversight monitoring and coaching. • Perform an assessment of Operator performance by the operations oversight managers. • Training will be provided to site managers on performing management observations of Operations.
6.	Complete restart actions to improve apparent cause evaluations, as summarized in Section V.A.5. Remaining actions include: • The number of Apparent Cause evaluators will be reduced. • Condition Report Analysts within each section will receive strengthened roles and responsibilities with respect to apparent cause analyses. They will receive the same training as Apparent Cause evaluators, and will attend CARB meetings to enhance their standards for review and acceptance of apparent cause analysis.
7.	A process owner/facilitator will be identified to improve the consistency of problem solving and decision-making.

Appendix C -- Remaining Major Actions for Restart

No.	Action
8.	ROP, CNRB, and NQA will make conclusions regarding the readiness of Davis-Besse to restart.
9.	Complete the Restart Readiness Reviews for the second Mode 4 and Mode 2
10.	Adjust the RCS Integrated Leakage Program to account for the results of the NOP test.
11.	Complete evaluation of SW flow balancing issue and identify and schedule corrective actions.
12.	Complete modification for Class 1E motor current overloads.
13.	Complete ETAP calculations and tap setting.
14.	Site personnel will be trained on proper procedure compliance prior to restart.
15.	Control rod drop surveillances will be performed when the plant returns to Mode 3.